



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200



D4634-141

Job Sheet 167074-K

Reprint

Part No: D4634-141

Job Qty: 1 ea

Part Name: Fwd, Center Ceiling Replacement Panel Assembly



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 10/23/17

Job Tracking No:

Due Date: 11/24/17

Created By: Mario Poulin

Type: SOLD

Description:

Note: DWG D4634 REV G SHEET 7 IPP Rev. A 12/08/09 New Issue DL IPP Rev B 12/11/08 Document release DL
VERIFIED BY: JLM IPP Rev C 13/07/09 Dwg Update DL verif: DD IPP Rev D Dwg Update 13/12/23 DL IPP
REV E Dwg update 14/01/09 DL IPP Rev F Dwg. update 14/02/03 DL IPP Rev G Dwg. Update 15/01/27 DL

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		11/23/17	0.00	0.00	Start Up Container		D.M.L 18-5-24
100	HandThermo	1 pcs		11/23/17	0.00	1.65	HandFinish4	2 hours	D.M.L 18-5-24
110	Small Fab	1 pcs		11/24/17	0.00	1.47	Small Fab		D.M.L 18-5-24
120	QC	1 pcs		11/24/17	0.00	0.00	QC5		PD 10-05-25
130	Packaging	1 pcs		11/24/17	0.00	0.00	Packaging3		D.M.L 18-5-28
140	QC21-SA	1 Ea		11/24/17	0.00	0.00	QC21		21 MAY 2 R 2018

Part Op 110 - Assemble as per Dwg D4634-141 Bond foam core to inside of panel 3M Scotch Weld 1300

Descriptions: Batch: 1003681 1- Scuff bonding surface to eliminate in-perfections and increase bonding and clean with wash& wipe 2- Locate and glue down Channel Assy, angles, brackets, and mounting pads using 3M Plastic welder II.(see note 8) Batch # _____ Expiry Date _____ 3- Apply labels as per Dwg. and seal with 3M 3950 edge sealer(see note 9) Batch: _____

120 - QC5- Inspect part completeness to step on W/O

130 - Identify as per dwg & Stock Location: _____

140 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D4634-1	Fwd, Center Ceiling Panel	1 Ea (1 ea)	90-Start up Operation	5054529
D4636-5	Bracket	1 Ea (1 ea)	90-Start up Operation	5003357
D4647-5	Doubler	1 Ea (1 ea)	90-Start up Operation	5003352
D4664-5	Spacer <u>1x003354</u>	6 Ea (6 ea)	90-Start up Operation	5033992
D4712-1	Bracket	1 Ea (1 ea)	90-Start up Operation	5008996
D4732-15	Label	1 Ea (1 ea)	90-Start up Operation	5008991
D4732-19	Label	1 Ea (1 ea)	90-Start up Operation	5008999
D5021-1	Foam, Center Panel, Fwd	1 Ea (1 ea)	90-Start up Operation	5033999
MPNY-750S-9-C	Mounting Pad	7 pcs (7 ea)	90-Start up Operation	FT1130423-1
MS20426AD3-4	Rivet	4 Ea (4 ea)	90-Start up Operation	FT1136665-70
MS20426AD4-6	Rivet	2 Ea (2 ea)	90-Start up Operation	FT1138621
MS21059L08	Nut	2 Ea (2 ea)	90-Start up Operation	FT123522-40

M.U-003401

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	D4634-1	1	2	0

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐			FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		
OTHER : ☐					

D4636-5	1	50	0
D4647-5	1	3	0
D4664-5	6	39	0
D4712-1	1	10	0
D4732-15	1	15	0
D4732-19	1	17	0
D5021-1	1	2	0
MPNY-750S-9-C	7	149	0
MS20426AD3-4	4	3,152	0
MS20426AD4-6	2	586	0
MS21059L08	2	221	0

Part Specifications

Specifications could not be found.

Plex 5/22/18 11:43 AM Dart.lajeunesse.marie

DQA: _____ Date: _____

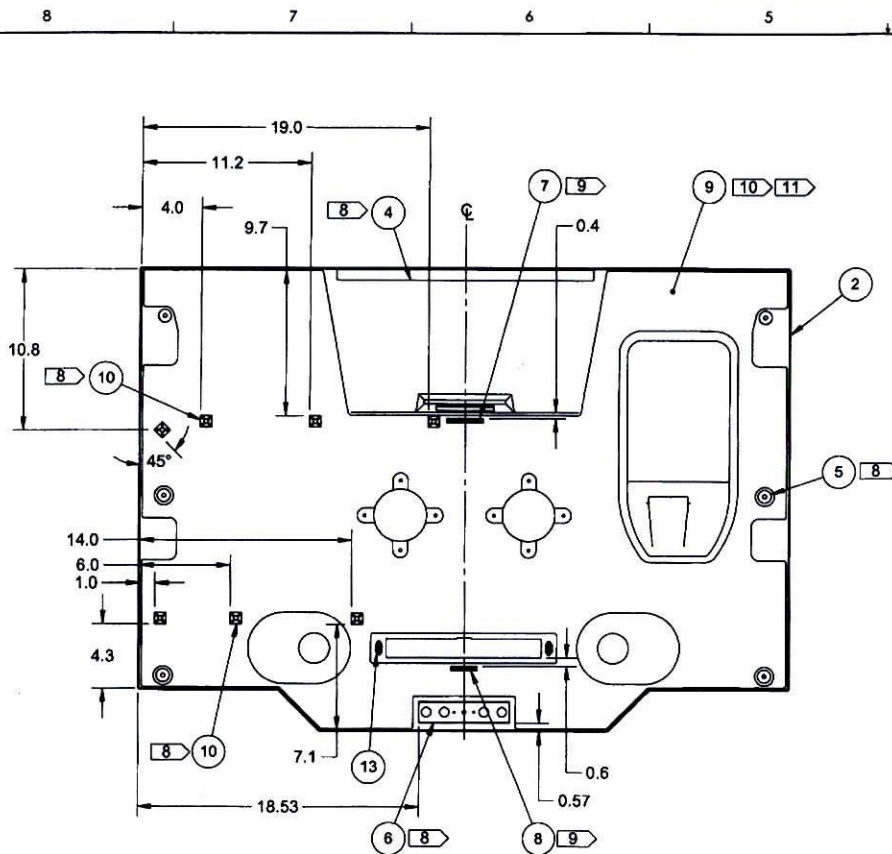


WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

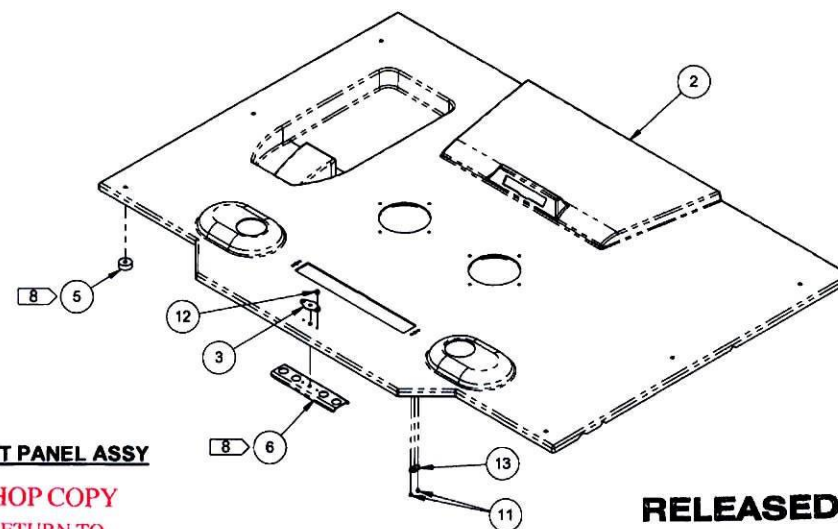


D4634-141 FWD, CENTER CEILING REPLACEMENT PANEL ASSY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) APPLY A BEAD (0.20 TO 0.30 WIDE) OF DEVCON PLASTIC WELDER II (0.25 INSIDE OF BOTH EDGES OF PART) TO BOND D4664-5, D4712-1 & MPNY-750S-9C. WAIT FOR 2 TO 4 HOURS FOR FUNCTIONAL CURE.
- 9) LOCATE LABELS AS SHOWN, SEAL LABELS USING 3950 EDGE SEALER OVER LABEL TOP SURFACE
- 10) APPLY AN EVEN COAT OF 3M SCOTCH WELD 1300L CONTACT ADHESIVE TO BOND D5021-1 FOAM CORE TO INSIDE OF PANEL
- 11) CENTER D5021-1 FOAM ON D4634-1

ITEM	QTY	P/N	DESCRIPTION
1	X	D4634-141	FWD, CENTER CEILING REPLACEMENT PANEL ASSY
2	1	D4634-1	FWD, CENTER CEILING PANEL
3	1	D4636-5	BRACKET
4	1	D4647-5	DOUBLER
5	6	D4664-5	SPACER
6	1	D4712-1	BRACKET
7	1	D4732-15	LABEL
8	1	D4732-19	LABEL
9	1	D5021-1	FOAM, CENTER PANEL, FWD
10	7	MPNY-750S-9-C	MOUNTING PAD
11	4	MS20426AD3-(4)	RIVET, SOLID, CSK
12	2	MS20426AD4-(6)	RIVET, SOLID, CSK
13	2	MS21059L08	NUT PLATE



RELEASED

2015 JAN 26 *up*

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *167074-K*
ML5
18-05-22

APPROVED

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AK	DRAWING NO.	REV. G
MFG. APPR.	DL	D4634	SHEET 7 OF 17
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CENTER CEILING PANELS	NTS
DATE	14.11.28	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMERCIALIZED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																		
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																		
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																		
Large Fab ☐	Composite ☐	Supplier ☐																			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval																	
DART Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 CANADA TEL: 1 813 632-5200 Email: sales@dartaero.com www.dartaerospace.com Container No: S074089 Part: D4634-141 Job No: 167074-K Serial No/Batch: S074089 Revision: G Inspector: _____ Date: 05/24/18				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																	
<table style="width:100%; border: none;"> <tr> <td style="width:25%; border: none;"> Environm De Doc/I Equip/Tool Handling/Pre </td> <td style="width:25%; border: none;"> Material Internal Transport Tribal Knowledge LOA Substation Past Expiry Date Misidentified </td> <td style="width:25%; border: none;"> Use for Testing Poor Information Rushing Product Improvement Process Improvement Manufacturing Process Past Due </td> <td style="width:25%; border: none;"> Crimp/Kink/nipple/wave Cuffs Crushing Heat Treat Wave/Twist in Tube Marks/Chatter OTHER : _____ </td> </tr> </table>					Environm De Doc/I Equip/Tool Handling/Pre	Material Internal Transport Tribal Knowledge LOA Substation Past Expiry Date Misidentified	Use for Testing Poor Information Rushing Product Improvement Process Improvement Manufacturing Process Past Due	Crimp/Kink/nipple/wave Cuffs Crushing Heat Treat Wave/Twist in Tube Marks/Chatter OTHER : _____													
Environm De Doc/I Equip/Tool Handling/Pre	Material Internal Transport Tribal Knowledge LOA Substation Past Expiry Date Misidentified	Use for Testing Poor Information Rushing Product Improvement Process Improvement Manufacturing Process Past Due	Crimp/Kink/nipple/wave Cuffs Crushing Heat Treat Wave/Twist in Tube Marks/Chatter OTHER : _____																		
<table style="width:100%; border: none;"> <tr> <td style="width:50%; border: none;"> CATEGORY ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center </td> <td style="width:50%; border: none;"> ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence </td> </tr> </table>					CATEGORY ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center	☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence															
CATEGORY ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center	☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence																				